karuun® The hidden treasure









FOCUS OPEN 2024



DGNB SUSTAINABILITY CHALLENGE

karuun®

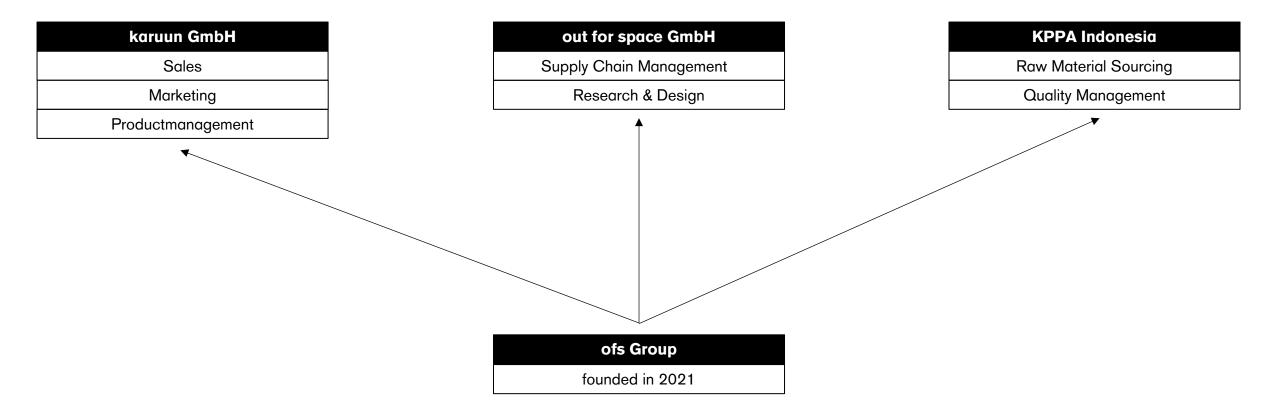






The ofs Group

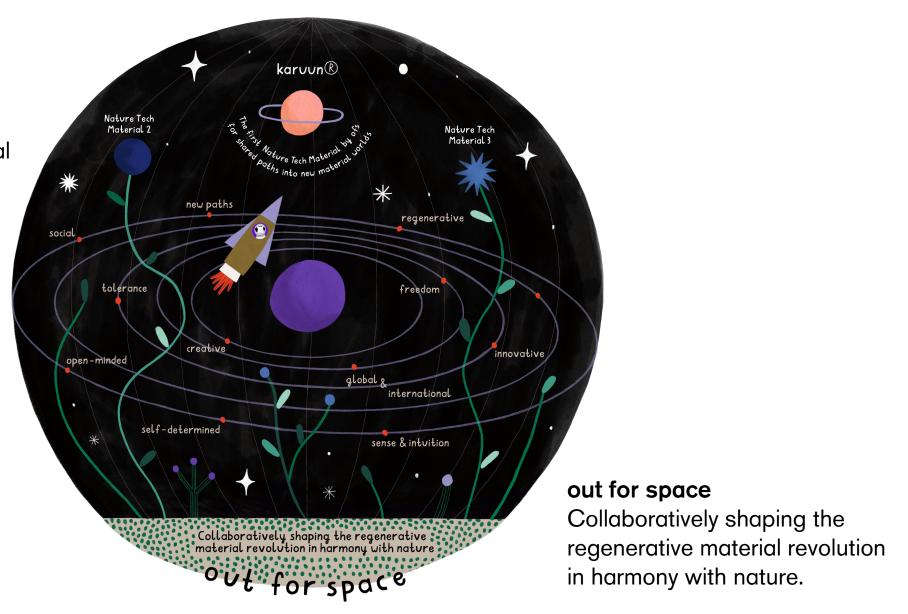
Our growth and structural development at a glance



Our Core Vision

karuun®

The first Nature Tech Material by out for space. For shared paths into new material worlds.



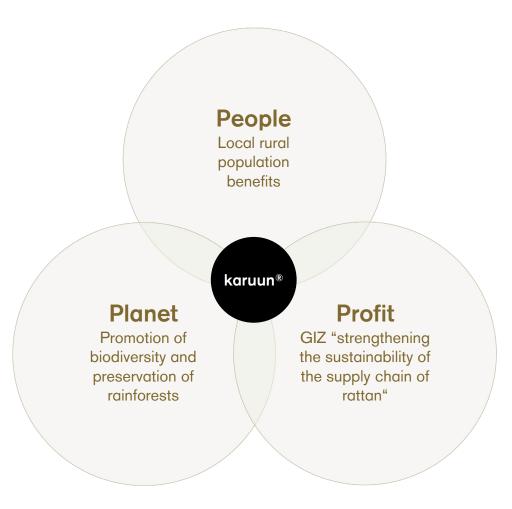
For people and nature



The karuun® cycle



Sustainability is at the heart of everything we do



RattanTrace-App



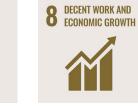
Social Leadership



10 of the 17 UN Sustainable Development Goals





















Planting and harvesting













The story begins...

Rattan an almost forgotten raw material









Facts

- type of palm with the most subspecies
- fast-growing~5 m per year
- tropical rainforest
 primary as well as secondary forests
- ~600 species worldwide~only 13 in use
- 80 % of market from Indonesia falling demand
- up to Ø 10 cm and up to 150 m long depending on type





Sustainability

- in symbiosis with the forest rattan relies on surrounding trees
- rainforest conservation
 more rattan more rainforest
- land use change
 Fairventures Worldwide and GIZ
- no monoculture
 cultivation only in the rainforest
- environmentally-friendly harvest harvested by hand
- fast-growingharvested after ~10 years

Advantages

- high elasticity
 thermally deformable like no other wood
- lightapprox. 400 kg/m3
- homogeneous structure
 not a common wood grain, parallel fibres
- no splintersdue to the long fibres
- flame retardant due to silica
- environmental background alternative to plastic or glass fibres







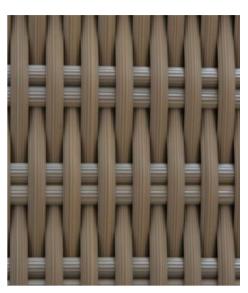
Reanimate Rattan

- outdated design mostly woven products
- incorrect applications furniture for outdoors
- forgotten raw material due to poor quality
- low level of development no innovations
- confused with bamboo similar skin, but it's not a grass like bamboo







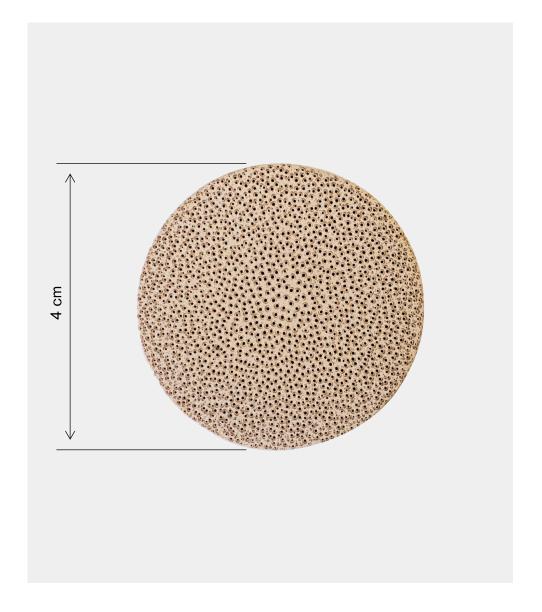


Our production



Our processing technology

The rattan palm can transport water up to 150 m along its capillaries. out for space uses this natural property for a unique, patented finishing process.



Innovation



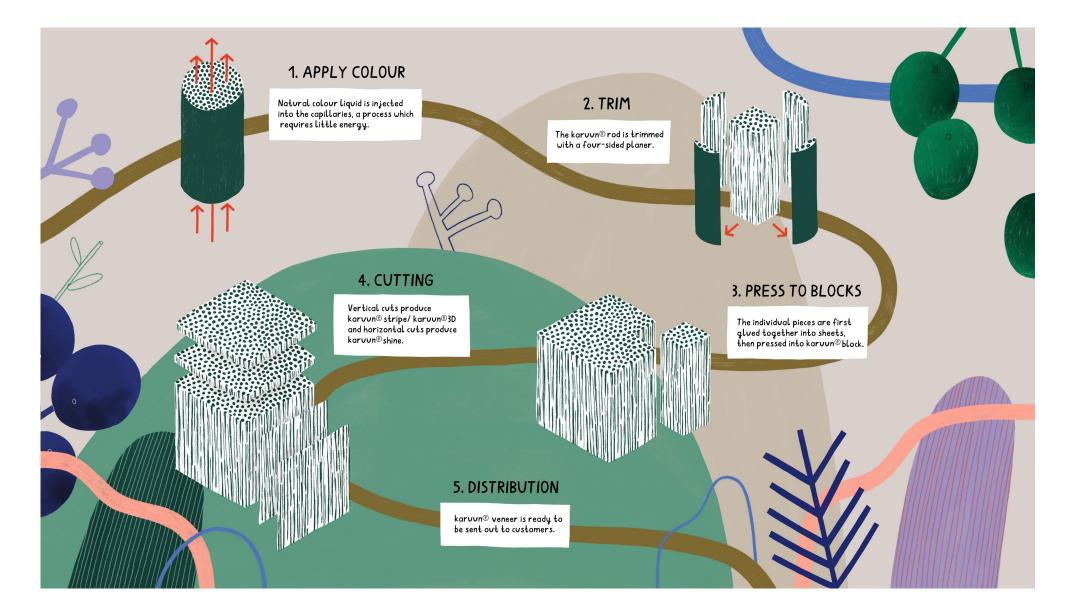




karuun® color

- custom capillary color almost every color and combination possible
- treatment of the whole cross-section coloring not only the surface
- innovative processing color structure maintained after cutting
- various designs
 from linear stripes to translucent spots
- seamless appearance no glue visible
- light coloring possible naturally light

The karuun® production



karuun® is natural perfection



karuun® stripe

Ideal for use as a surface or postforming elements and for coating all types of substrates.



karuun® shine

A lightweight material that is permeable to light and air, with exceptional stability, formability and feel.



Nature Tech Service

Development in harmony with nature. Creating innovative products with karuun®.

Features and unique selling points

lightweight formable

conductive translucent

sustainable low emission

karuun® stripe

- very flexible
 due to the long fibres
- every color in linear structure possible thanks to the innovative colouring
- light treatment with wood stain very light colors possible
- Two-Tone design gives you design freedom
- very light after bleaching thanks to the natural color
- 15% light transmission
 at 59° scattering angle with karuun® stripe natura





karuun® 3D

- incomparable 3D shaping with a special viscose fabric
- small to large spherical objects from buttons to seat shells
- light alternative to fibreglass
- surface or substructure post-forming or moulding
- alternative to plastic
 extremely deep drawing possible





karuun® shine

- permeable to air and light open capillary structure
- 50% light transmission with natural optic
- acoustic
 sound insulation due to irregular small holes
- pleasant to the touch hard, smooth and durable
- formable despite being end-grain





Nature Tech Service

Development in harmony with nature. Creating innovative products with karuun®.

- Design comprehensive consulting from conception to completion
- Implementation customer-specific support and implementation
- After Sales
 support for partners in all aspects
 of care and maintenance

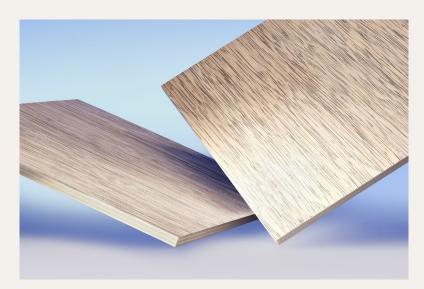








karuun® as an exclusive solution for your project



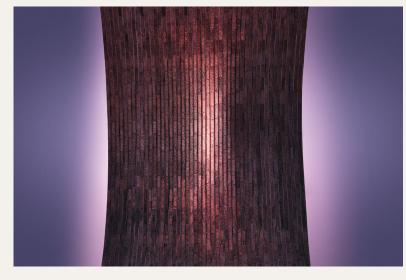
karuun® panel

The first panel made of karuun® as a natural alternative to artificial surfaces.



karuun® color collection

A distinctive color collection that elegantly combines nature and design.



karuun® concepts

A pioneering solution for technical veneers based on karuun® stripe.

karuun® color collection



karuun® color collection



karuun® concepts



karuun® concepts



"As manufacturers of technological veneers with a focus on material combinations, we are constantly looking for new ways to create original designs.

By using Karuun as the foundation for technological advancements, a whole new realm of design is opened up. In the future, we will collaborate with Karuun on creative and sustainable designs. This is just the start."

Felix Kruschel, Developer Fritz Kohl Concepts

karuun® applications for your industry







Sustainable Architecture

Reference customers



Replace Plastic

⇔ NIO









HAWORTH

MAGIS

STADLER



ID DUOTONE



Green Mobility













Sustainable Architecture













Replace Plastic













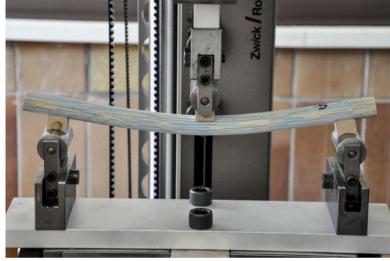
karuun® Research & Design



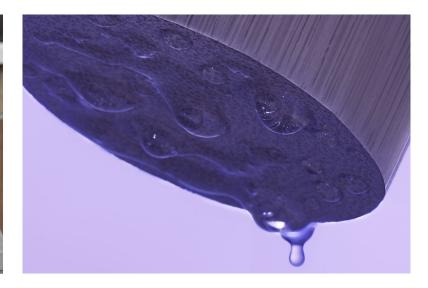
karuun® materials in development



karuun® conductive
Enhancing conductivity



karuun® solid Enhancing hardness and stiffness

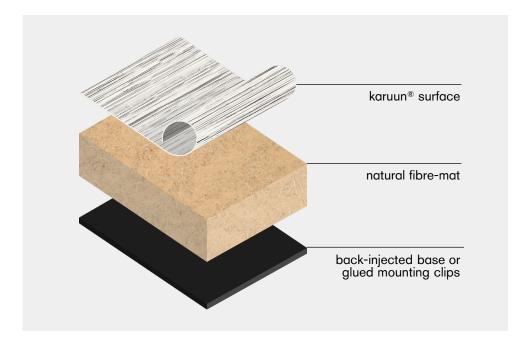


karuun® proof
Enhancing durability and
weather-resistance

The symbiosis with natural fibre-mats

karuun® with its unique 3-dimensional shaping properties is the perfect fit to be processed with natural fibre-mats:

- Reduction of plastic content up to 80% less CO₂ emissions and weight
- Advanced and adaptable production using automotive-proven materials and toolings
- natural and vegan way to cover 3D-shapeable fibre-mats broad range of superior karuun[®] material optics
- sustainable lifecycle
 material separation for recycling





Thank you.